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NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116				
EXAMINER				
HOLLIDAY, JAIME MICHELE				
ART UNIT		PAPER NUMBER		
2617				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Notice of Allowability****Application No.**

10/709,789

**Applicant(s)**

JIANG, SAM SHIAW-SHIANG

**Examiner**

JAIME M. HOLLIDAY

**Art Unit**

2617

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed August 26, 2008.
2. ☒ The allowed claim(s) is/are 4-7 and 11-14.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

***Response to Arguments***

1. Applicant's arguments, see REMARKS, filed August 26, 2008, with respect to claims 4-7 and 11-14 have been fully considered and are persuasive. The U.S.C. 103 (a) rejection of claims 4-7 and 11-14 has been withdrawn.

***Allowable Subject Matter***

2. **Claims 4-7 and 11-14** are allowed, and are renumbered claims 1-8, respectively.
3. The following is an examiner's statement of reasons for allowance:

Consider **claim 4**, the most relevant prior art of record, Yi et al. (US 2003/0007459 A1) in view of Meyer et al. (US 2004/0148546 A1)., fail to specifically disclose that the sender ignores status reports if a RESET ACK PDU has not been received during a reset procedure.

Yi et al., shows and discloses a method of controlling a reset procedure for a radio communication link between a sender and a receiver (a method for re-transmitting data or control information in a radio link control layer relates to determining whether re-transmission will be ended by comparing a number of transmission with a critical value when the transmission of data or control information has successively failed [abstract]); the receiver transmitting at least a receiving status report to the sender (sender RLC layer receives the state information with which success of transmission can be judged from the receiver and retransmits the RLC PDU, which requires re-transmission. The

state information including the information of the lost PDU is loaded in the Status PDU and transmitted by the receiver. The Status PDU can be transmitted from the sender to the receiver. The receiver checks the serial numbers of the received RLC PDU and transmits the status PDU including the information of positive acknowledgement or negative acknowledgement to the sender, thus to support the process of re-transmission of the sender [paragraphs 24, 25, 27]); the sender receiving at least one receiving status report sent from the receiver, determining that the receiving status report contains protocol error, activating a reset procedure, and transmitting a RESET PDU to the receiver, and recognizing the reset procedure as ongoing before the sender receives a RESET ACK PDU outputted from the receiver (sender sends a reset instruction for instructing reset of the radio link control layer to the receiver, when the number of transmission of the MRW instruction is the same as or larger than MaxMRW which is the critical value as sending of the MRW instruction which is control information is successively failed, and the MRW instruction which was sent right before is turned out to have failed [paragraph 82]).

Meyer et al., shows and disclose controlling the sender to ignore at least a second receiving status report outputted from the receiver when the reset procedure is ongoing, wherein the second receiving status report is received later than the first receiving status report (Messages are sent between the RLC entities of the RLC transmitter TR and the RLC receiver RE. The RLC transmitter TR sends 3 PDUs with sequence numbers SN=1, 2 and 3. The PDU with SN=2 is lost, e.g. due to a disturbance during radio transmission, and does not reach the RLC receiver. By

receiving the PDU with SN=3 the RLC receiver can detect the loss of the PDU with sequence number 2 if a transmission in the order of increasing sequence numbers is performed. The loss triggers a transmission of a first status report or status message  $S_{11}$ , which requests a retransmission of the PDU with SN=2. In the first status report  $S_{11}$ , the sequence number 3 is acknowledged (ACK=3) while sequence number 2 is reported as missing (NACK=2). Upon receiving the first status report  $S_{11}$ , the RLC transmitter retransmits the PDU with SN=2. The transmitter TR stores in a memory that sequence number SN=2 corresponds to a retransmission prohibit timer RPT1. The PDU with SN=2 is included in the second status report  $S_{12}$  since the receiver has not yet received it and is unaware that a retransmission is already on the way. In reply to the second status report  $S_{12}$  with the retransmission request for SN=2 and 4, the RLC transmitter only retransmits the PDU with SN=4. For sequence number SN=2 a check of the memory has the result that the first retransmission prohibit timer RPT1 is running for SN=2. The expiry threshold for this timer is not yet reached. Therefore, the PDU with SN=2 is not selected for retransmission [abstract, paragraphs 50-58], wherein if the second status report only has SN=2, it would be inherent that the transmitter would check its memory, recognize that a retransmission of this particular PDU has occurred, and disregard the entire report.)

Yi et al. and Meyer et al., however, lack the claimed limitation "controlling the sender to ignore at least a second receiving status report outputted from the receiver when the sender has not received a RESET ACK PDU from the receiver and the rest procedure is ongoing," therefore this limitation, in conjunction with other limitations

recited in claim 4, is novel and unobvious in view of the combination of Yi et al. and Meyer et al.

Consider **claim 11**, the most relevant prior art of record, Yi et al. (US 2003/0007459 A1) in view of Meyer et al. (US 2004/0148546 A1), fail to specifically disclose that the sender ignores status reports if a RESET ACK PDU has not been received during a reset procedure.

Yi et al., shows and disclose a sender in wireless communication with a receiver for receiving at least a first receiving status report sent from the receiver, the sender (sender RLC layer receives the state information with which success of transmission can be judged from the receiver and retransmits the RLC PDU, which requires re-transmission. The state information including the information of the lost PDU is loaded in the Status PDU and transmitted by the receiver) comprising: a communication interface for activating a reset procedure and transmitting a RESET PDU to the receiver when determining that the first receiving status report contains protocol error; and a decision logic electrically connected to the communication interface for recognizing the reset procedure as ongoing before the communication interface receives a RESET ACK PDU outputted from the receiver (Status PDU can be transmitted from the sender to the receiver. For example, if the serial numbers of the received RLC PDU are #23, #24, #25, #32 and #34, the RLC PDUs having the serial numbers of #26 to #31 and #33 are presumed to be lost. The receiver checks the serial numbers of the received RLC PDU and transmits the status PDU including the information of positive acknowledgement or negative acknowledgement to the sender, thus to support the process of re-

transmission of the sender. The sender sends a reset instruction for instructing reset of the radio link control layer to the receiver, when the number of transmission of the MRW instruction is the same as or larger than MaxMRW which is the critical value as sending of the MRW instruction which is control information is successively failed, and the MRW instruction which was sent right before is turned out to have failed [abstract, paragraphs 24, 25, 27, 82]).

Meyer et al. clearly show and disclose wherein the decision logic controls the communication interface to ignore at least a second receiving status report outputted from the receiver when the reset procedure is ongoing; wherein the second receiving status report is received later than the first receiving status report (Messages are sent between the RLC entities of the RLC transmitter TR and the RLC receiver RE. The RLC transmitter TR sends 3 PDUs with sequence numbers SN=1, 2 and 3. The PDU with SN=2 is lost, e.g. due to a disturbance during radio transmission, and does not reach the RLC receiver. By receiving the PDU with SN=3 the RLC receiver can detect the loss of the PDU with sequence number 2 if a transmission in the order of increasing sequence numbers is performed. The loss triggers a transmission of a first status report or status message  $S_{11}$ , which requests a retransmission of the PDU with SN=2. In the first status report  $S_{11}$ , the sequence number 3 is acknowledged (ACK=3) while sequence number 2 is reported as missing (NACK=2). Upon receiving the first status report  $S_{11}$ , the RLC transmitter retransmits the PDU with SN=2. The transmitter TR stores in a memory that sequence number SN=2 corresponds to a retransmission prohibit timer RPT1. The PDU with SN=2 is included in the second status report  $S_{12}$

since the receiver has not yet received it and is unaware that a retransmission is already on the way. In reply to the second status report  $S_{12}$  with the retransmission request for SN=2 and 4, the RLC transmitter only retransmits the PDU with SN=4. For sequence number SN=2 a check of the memory has the result that the first retransmission prohibit timer RPT1 is running for SN=2. The expiry threshold for this timer is not yet reached. Therefore, the PDU with SN=2 is not selected for retransmission [abstract, paragraphs 50-58], wherein if the second status report only has SN=2, it would be inherent that the transmitter would check its memory, recognize that a retransmission of this particular PDU has occurred, and disregard the entire report.)

Yi et al. and Meyer et al., however, lack the claimed limitation "decision logic controls the communication interface to ignore at least a second receiving status report outputted from the receiver when the sender has not received a RESET ACK PDU from the receiver and the rest procedure is ongoing," therefore this limitation, in conjunction with other limitations recited in claim 11, is novel and unobvious in view of the combination of Yi et al. and Meyer et al.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAIME M. HOLLIDAY whose telephone number is (571)272-8618. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jaime M Holliday/  
Examiner, Art Unit 2617

/Charles N. Appiah/  
Supervisory Patent Examiner, Art Unit 2617